Appl. No. 10/537,598
Amendment and/or Response
Reply to Office action of 26 March 2008

Page 5 of 11

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.(Currently Amended) A diversity receiver having multiple antenna receiving branches, ~~characterized in that~~ wherein each branch has estimating means for estimating at least a receiving channel parameter, and ~~that the channel parameter~~ wherein first estimating means in one branch ~~are~~ is directly coupled to ~~the channel parameter~~ second estimating means in an other branch for using at least a part of the channel parameter estimate in the one branch as an aid for estimating at least a receiving channel parameter in the other branch.

2.(Currently Amended) The diversity receiver according to claim 1, ~~characterized in that~~ wherein the channel parameter estimate in the one branch is used as a starting point for the channel parameter estimate in the other branch.

3.(Currently Amended) The diversity receiver according to claim 1, ~~characterized in that~~ wherein the channel parameter estimate in the one branch provides a coarse channel parameter estimate, ~~which~~ and wherein said coarse channel parameter estimate is used as a start for the channel parameter estimate in the other branch.

4.(Currently Amended) The diversity receiver according to claim 1, ~~characterized in that~~ wherein the second estimating means in the other branch ~~are~~ is directly coupled to the first estimating means in said one branch for using at least a

Appl. No. 10/537,598
Amendment and/or Response
Reply to Office action of 26 March 2008

Page 6 of 11

part of the channel parameter estimate in the other branch as an aid for estimating the receiving parameter channel in said one branch.

5.(Currently Amended) The diversity receiver according to claim 1, ~~characterized in that~~ wherein the diversity receiver has two antenna receiving branches.

6.(Currently Amended) The diversity receiver according to claim 1, ~~characterized in that the system (1)~~ wherein the diversity receiver is arranged for estimating a time delay between the appearance of a certain channel parameter estimate in the various branches.

7.(Currently Amended) A mobile radio communication device provided with ~~a~~ the diversity receiver according to claim 1, ~~diversity receiver having multiple antenna receiving branches, characterized in that each branch has means for estimating at least a receiving channel parameter, and that the channel parameter estimating means in one branch are coupled to the channel parameter estimating means in another branch for using at least a part of the channel parameter estimate in the one branch as an aid for estimating at least a receiving channel parameter in the other branch.~~

8.(Currently Amended) A method ~~wherein~~ for receiving a signal ~~is received~~ comprising the acts of:
receiving the signal through multiple antenna receiving ~~branches, characterized in that~~ branches;
in each branch, ~~an estimation is made~~ estimating parameters about a received ~~channel, and that~~ channel to form channel estimation results;
directly exchanging the channel estimation results between a first branch and a second branch; and

Appl. No. 10/537,598
Amendment and/or Response
Reply to Office action of 26 March 2008

Page 7 of 11

using first channel estimation results about a first received channel from ~~one~~ the first branch ~~are being used~~ as an aid for estimating ~~the~~ parameters about a second received channel in ~~an other~~ the second branch and forming second channel estimation results.

9.(Currently Amended) Signals suited for applying the method according to claim 8 wherein a signal is received through multiple antenna receiving branches, ~~characterized in that~~ wherein in each branch an estimation is made about a received channel, and ~~that~~ wherein channel estimation results from one branch are being used as an aid for estimating the received channel in an other branch.

10.(New) The method of claim 8, further comprising the acts of:
estimating a delay value between a first channel parameter in the first branch and the first channel parameter in the second branch; and
synchronizing estimation in the branches by using the delay value.